

Student Research Summary

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Title: Targeting and Scaling-up of Agricultural Water Management Interventions in the Black Volta Basin - Ghana

Project #: v1

Institution: Kwame Nkrumah University of Science and Technology

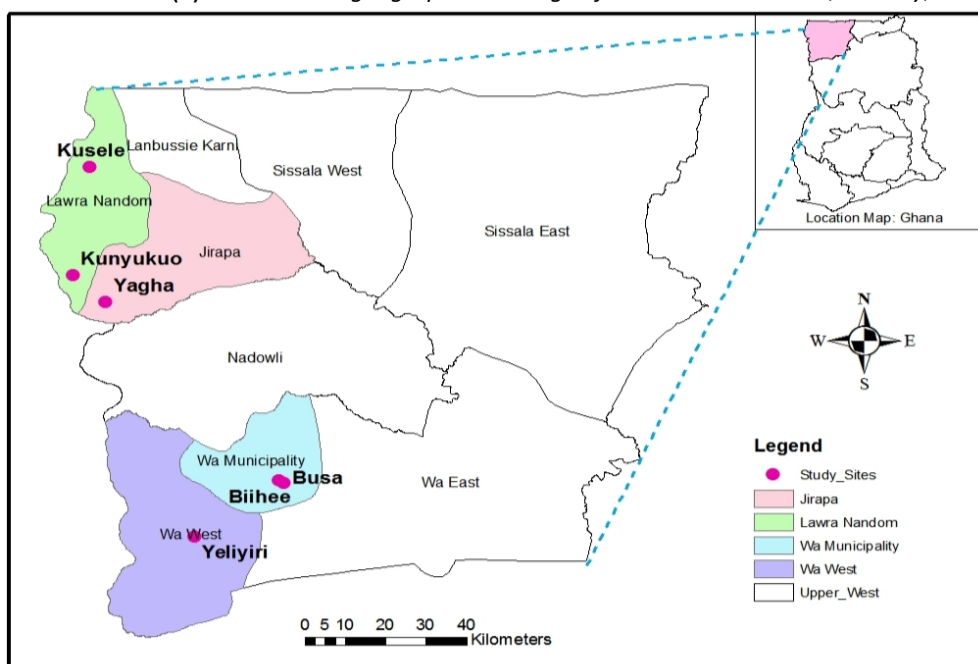
Degree Programme: MSc in Water Resources Engineering and Management

Supervisors: Prof. Samuel Nii Odai and Mr. Frank Ohene Annor

Date: 18th September, 2012

Please supply the following information—under the corresponding heading—in no more than 4 pages.

Research site(s): indicate the geographic coverage of this research—basin, country, community, etc



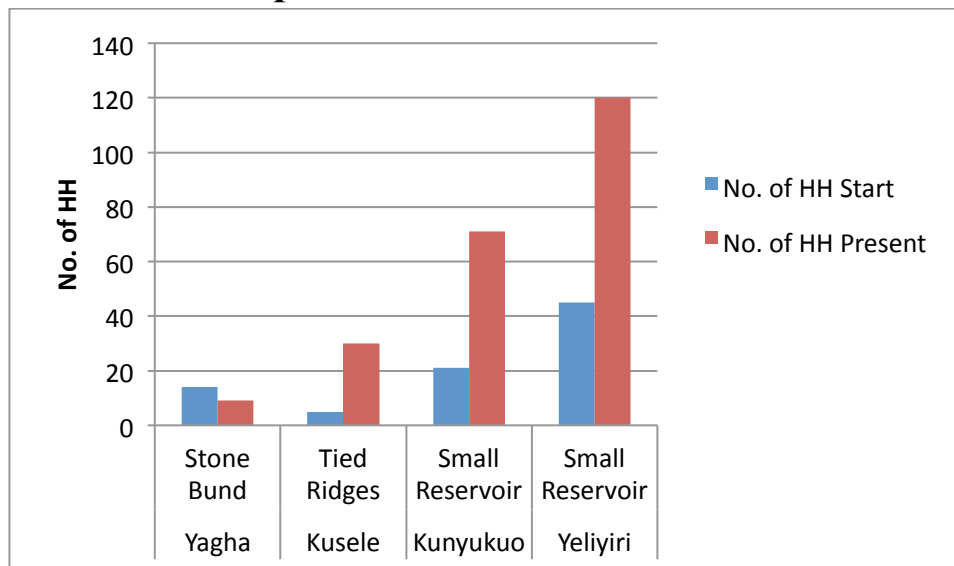
Research question(s) addressed: *which research questions did this work set out to address?*

1. What are the types and details of AWM interventions available in the study area, their adoption rates, their impacts on crops and livestock?
2. What are the biophysical and socio-economic parameters that could influence the success or failure of these AWM interventions?

3. Which locations within the region have similar biophysical and socio-economic parameters for the up-scaling of successful AWM interventions?

Key findings: *summarize and concisely present key findings*

Adoption rates of interventions



Years of Data

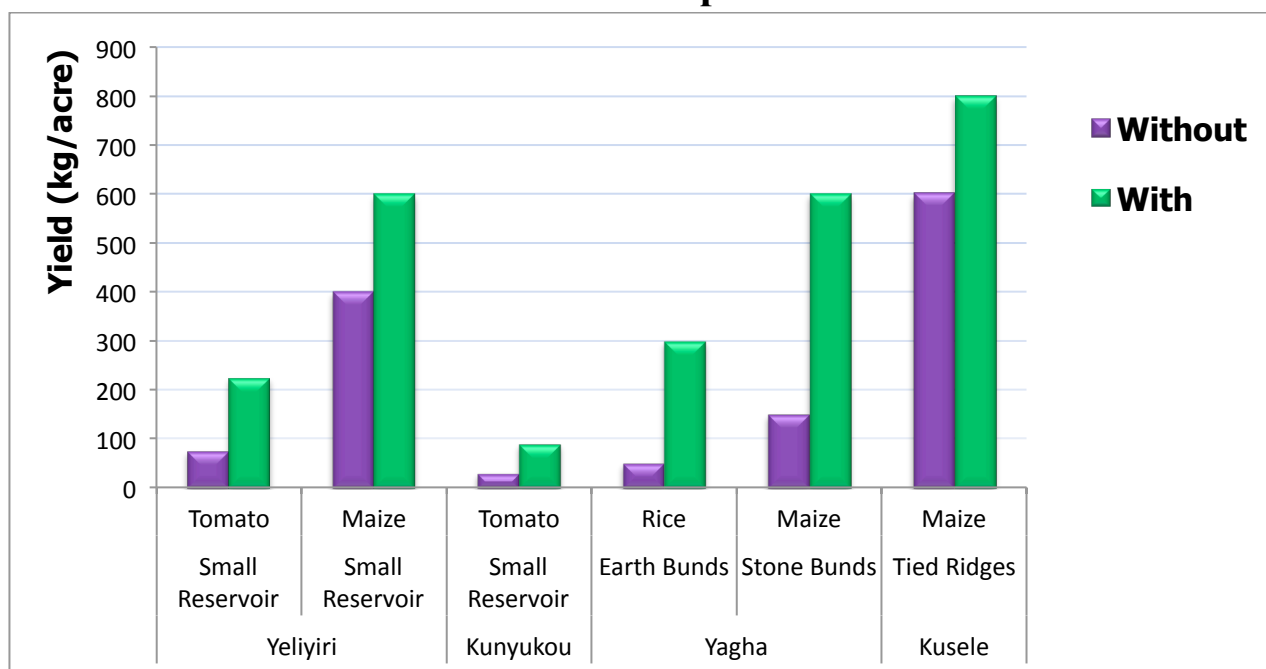
Yagha: 1997 - 2011

Kusele: 1999 - 2011

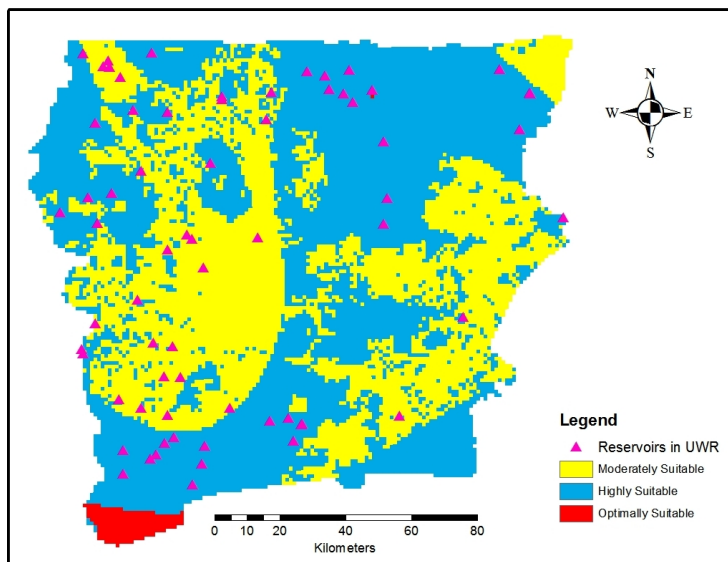
Kunyukou: 2001 - 2011

Yeliyiri: 1996 - 2011

Yield of Crops

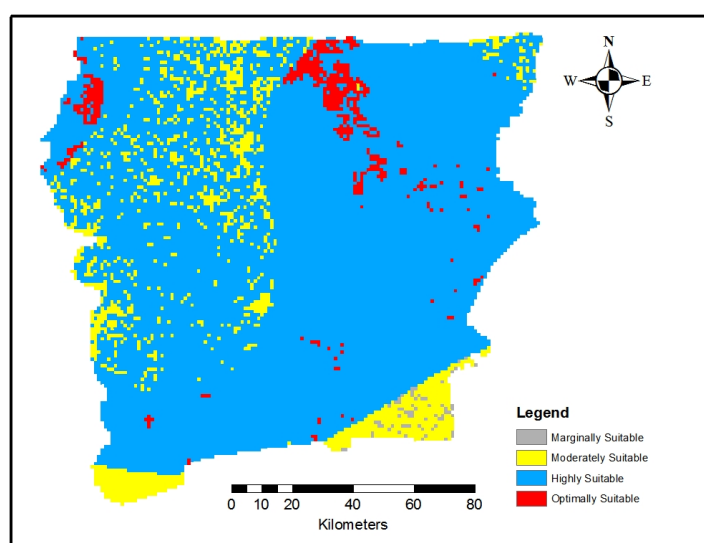


Success of interventions are not only attributed to the use of the interventions alone but also linked to other factors such as the use of fertilizers, access to markets and transportation and better agronomic practices.



Suitability	Area (%)	% of SR
Moderate	41.50	34.85
High	57.25	61.15
Optimal	1.25	0

Validated Map of Potential Areas for Small Reservoirs



Suitability	Area (%)
Optimal	3.14
High	85.40
Moderate	11.04
Marginal	0.42

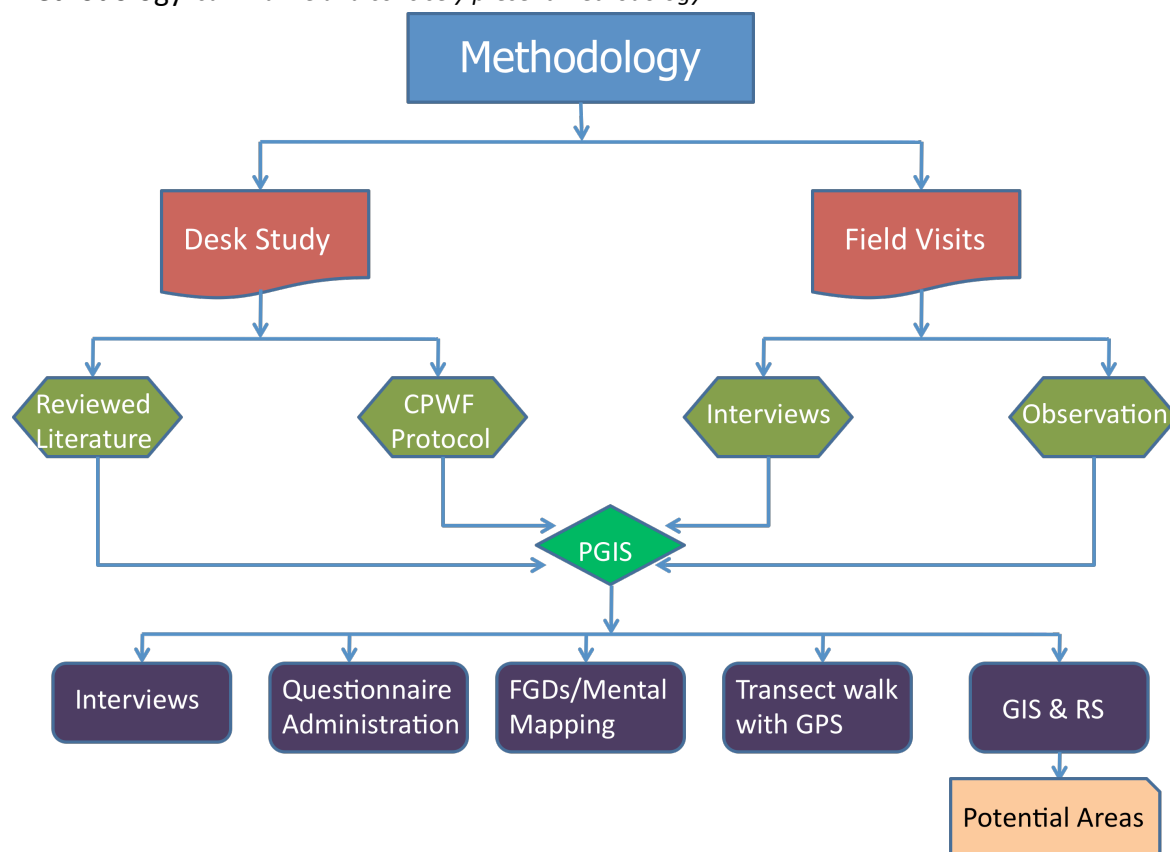
Map of Potential Areas for Stone Bunds

Recommendations: *summarize and concisely present recommendations*

- ❑ Access to on and off farm agricultural inputs should be made available and where necessary affordable to enhance agricultural productivity.

- ❑ Policy makers and donors could use the potential maps for small reservoirs and stone bunds as a first point of call during decision making and implementation.

Methodology: *summarize and concisely present methodology*



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